



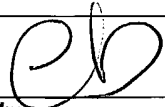
# UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/941,693	08/30/2001	Tsuyoshi Yamane	2001_1217A	6192
513	7590	07/26/2004	EXAMINER	
WENDEROTH, LIND & PONACK, L.L.P.			JOLLEY, KIRSTEN	
2033 K STREET N. W.			ART UNIT	
SUITE 800			PAPER NUMBER	
WASHINGTON, DC 20006-1021			1762	

DATE MAILED: 07/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center"><b>Office Action Summary</b></p>	<b>Application No.</b> 09/941,693	<b>Applicant(s)</b> YAMANE ET AL.	
	<b>Examiner</b> Kirsten C Jolley	<b>Art Unit</b> 1762	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 February 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 11-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings were received on February 17, 2004. These drawings are accepted.

### ***Response to Arguments/Amendments***

2. The claim objections have been withdrawn in response to Applicant's amendments to the claims.
3. The 35 USC 102(e) rejections over Yamane have been withdrawn in response to Applicant's certified English translation of the foreign priority document.
4. Dependent claims are newly rejected in view of Watanabe et al. (as discussed below), therefore this action is made non-final.
5. Applicant's arguments filed February 17, 2004 have been fully considered but they are not persuasive.

Applicant argues that in Saatweber et al., as paint is applied to an article, components of the paint are consumed such that the overall solid content and liquid content within the system becomes decreased. Applicant states that Saatweber et al. does not disclose or suggest any manner by which this decrease in volume is to be compensated for such that the total amount of liquid within the recycling system is constant during spray coating. It is noted that Saatweber et al. teaches in col. 7, lines 57-59 that "In the topping-up unit further constituents can also be mixed in which were drawn off during the process from circuits A, B or C, e.g. water or volatile constituents. Saatweber et al. also discloses in col. 4, lines 25-27 "Only water removed in the

Art Unit: 1762

course of the process, for instance as a result of evaporation, is replaced with desalinated water.”

Therefore, Saatweber et al. teaches adding in the liquids which were drawn off/evaporated or consumed during the spray coating. Further, it is noted that the process of Saatweber et al. is similar to that of Embodiment 1 of Applicant's, as described on page 6 of the specification, in which the filtrate of the ultrafiltration system is sent back to the coating booth for collecting overspray.

Applicant states that Saatweber et al. discloses no operations that would lead one to believe that the amount of liquid in the system is trying to be maintained constant. The Examiner disagrees. The statement by Saatweber et al. that constituents may be added which were drawn off during the coating process (water or volatile constituents) indicates that Saatweber et al. is trying to maintain the amount of liquid in the system constant.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 16-24, 26, and 28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 16 recites the limitation "said filtrate bath" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 18 recites the limitations "said settling tank" and "said rinse tank" in lines 3-4. There is insufficient antecedent basis for these limitations in the claim.

Art Unit: 1762

Claims 19, 26, and 28 are vague and indefinite because each claim depends upon itself. For the purpose of examination, claim 19 has been interpreted as being dependent upon claim 18; claim 26 has been interpreted as being dependent upon claim 25; and claim 28 has been interpreted as being dependent upon claim 27.

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 11-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Saatweber et al. (US 5,453,301).

The claims remain rejected for the reasons set forth in section 12 of the prior Office action, as well as for the reasons discussed above.

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 13 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saatweber et al. (US 5,453,301).

Art Unit: 1762

The claims remain rejected for the reasons set forth in section 16 of the prior Office action, as well as for the reasons discussed above.

12. Claims 14-23, 25-28, and 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saatweber et al. in view of Watanabe et al. (US 6,251,483).

Saatweber et al. lacks the disclosure of storing filtrate in a filtrate bath after filtering through the ultra-filtration unit. Watanabe et al. teaches a recycling process comprising an ultra-filtration step, similar to Saatweber et al., including a step of storing filtrate 9 from the ultra-filtration unit in a filtrate tank 8 (col. 9, lines 10-12). Watanabe et al. teaches that the filtrate 9 may then be reused as collecting solution for collecting excess overspray. It would have been obvious to have added a filtrate tank into the process of Saatweber et al., upon seeing the process of Watanabe et al., in order to temporarily store and collect the filtrate before reusing the filtrate with the expectation of similar results. It is noted that when the filtrate in the process of Saatweber et al. is reused as water in the wet walls of the spray booth, the wet wall water functions to clean the interior of the coating booth. This is performed even when spray coating is not performed.

As to claims 16, 27-28, it is noted that the wet wall water from the coating booth is supplied to Saatweber et al.'s condensation bath. Further, it is noted that Saatweber et al. also discloses in col. 4, lines 25-27 "Only water removed in the course of the process, for instance as a result of evaporation, is replaced with desalinated water," therefore it also would have been obvious to have supplied fresh, desalinated water to the condensation bath as well.

Art Unit: 1762

As to claims 18-23, it would have been obvious to have added a settling tank in combination with the condensation tank 13 in the process of Saatweber et al. in order to add additional time that the collected wet wall water may be settled and the paint solids separated, and with the expectation of similar and successful results because the addition of a settling tank would not affect the remainder of the recycle system.

As to claim 30, it is noted that collected wet wall water is supplied into the condensation bath in an amount equal to an amount of filtrate conveyed into said coating booth. It would have been obvious to have supplied the water during a time period when spray-coating is not being performed as well as when the process is being performed in order to keep the process continuous.

#### ***Allowable Subject Matter***

13. Claim 24 would be allowable if rewritten to overcome the rejection under 35 USC 112, second paragraph, set forth above and if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art does not teach or fairly suggest the recycle method of claim 18, further including conveying a portion of filtrate from a rinse tank into the ultra-filtration apparatus so as to rinse the ultra-filtration apparatus.


#### ***Conclusion***

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kirsten C Jolley whose telephone number is 571-272-1421. The examiner can normally be reached on Monday to Thursday and every other Friday.

Art Unit: 1762

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive P Beck can be reached on 571-272-1415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Kirsten C Jolley  
Patent Examiner  
Art Unit 1762

kcj